

September 23, 2007

Mr. Kevin Tam  
29610 Mac Tan Road  
Valley Center, California 92082

**Subject: Revised Biological Resources Letter Report for the Tam Valley Center Property (TPM21002; ER 06-02-006)**

Dear Mr. Tam:

This letter documents the results of a general biological survey, wetland delineation, and impact assessment conducted for the Tam Valley Center Property.

### **Summary**

The proposed project involves a two parcel minor subdivision of a 5-acre lot in Valley Center, California. The property is characterized by an existing residence, associated improvements, and unimproved areas. Vegetation communities and other land cover on the property include Diegan coastal sage scrub, eucalyptus woodland, mulefat scrub (disturbed), southern mixed chaparral, southern willow scrub, urban/developed, and disturbed habitat. Two narrow ephemeral drainages occur on the property. Numerous special status species are known from the region, but none were detected on the property. Impacts from the proposed project include 2.46 acres of disturbed habitat, 1.28 acres of urban/developed, 0.28 acres of eucalyptus woodland, 0.22 acres of southern mixed chaparral, and 0.01 acres of non-County jurisdictional mulefat scrub. Mitigation measures include the designation of 0.77 acres of open space along the western property boundary, which would protect wetlands, wetland buffers, and upland habitats. Other measures are included to avoid impacts to migratory birds and raptors and best management practices to avoid potential indirect impacts.

### **Introduction**

**Project Description.** The proposed project is a two parcel minor subdivision of the existing approximately 5-acre legal lot. An existing home and associated improvements exist on the western portion of the property, and the proposed project would create a developable parcel on the eastern portion of the property.

**Location.** The approximately 5-acre property (APN 188-191-28) is located on the west side of Mac Tan Road north of Fruitvale Road at 29610 Mac Tan Road in Valley Center, California (Figure 1).

**Setting.** The property is comprised of an existing home, associated improvements, and unimproved areas covering approximately 5 acres. Surrounding land uses include residential, agricultural, and natural open space. The property is relatively flat at an elevation of approximately 1640 to 1660 feet above mean sea level. A small section of an unnamed blue-line drainage crosses the southwest corner of the property. A narrow ephemeral drainage course flows north to south across the eastern portion of the property. The soils in the study area are

mapped as Bonsall sandy loam, 2 to 9 percent slopes and Fallbrook sandy loam, 15 to 30 percent slopes (SCS 1973; Figure 2)

**Study Purpose.** The purpose of this study is to identify biological resources, analyze any potential impacts, and identify any recommended mitigation measures associated with the proposed project.

**Methods.** This technical letter report was prepared by Foothill Associates and is based on biological survey data collected by biologist Mike Howard of Foothill Associates on 19 September 2006. During the site survey, a general biological survey was conducted, including vegetation mapping and species list compilation. Additionally, a wetland delineation was conducted on both parcels defining the jurisdiction of the U.S Army Corps of Engineers (Corps), California Department of Fish and Game (CDFG), and County of San Diego. The entire study area was walked on foot, and all species observed or detected were identified and recorded. Searches of the California Natural Diversity Database (CNDDB) and in-house databases were conducted to identify species that may have been previously identified from the area.

### **Habitats / Vegetation Communities**

In summary, a total of 0.87 acres of vegetation communities and 4.15 acres of other land cover were mapped in the study area. Vegetation communities identified on the site include Diegan coastal sage scrub, eucalyptus woodland, mulefat scrub (disturbed), southern mixed chaparral, and southern willow scrub. Other land cover types include urban/developed and disturbed habitat. Table 1 shows the acreage of the communities and other land cover on the project site. Figure 3 shows the vegetation mapping and biological resources of the project site. Attachment A to this letter report lists the plant and animal species documented on the property. A brief discussion of each vegetation community and the species supported by the community is provided below.

**Diegan Coastal Sage Scrub (32500).** Diegan coastal sage scrub is comprised of low, soft-woody subshrubs to about 3 feet high, many of which are facultatively drought-deciduous. Dominant shrub species include California sagebrush (*Artemisia californica*), deerweed (*Lotus scoparius*), flat-top buckwheat, and black sage. Diegan coastal sage scrub is considered a sensitive habitat type by state and local agencies as it provides suitable habitat for numerous special-status plant and wildlife species. A very small patch of Diegan coastal sage scrub occurs in the southwest corner of the property covering less than 0.01 acres.

**Eucalyptus Woodland (11100).** Eucalyptus woodland is characterized by monotypic stands of gum trees (*Eucalyptus* spp.) with a poorly developed understory. The eucalyptus woodland on the property occur around the existing residence. Approximately 0.29 acres of eucalyptus woodland occur on the property.

**Mulefat Scrub (Disturbed) (63310).** Mulefat scrub on this property is comprised primarily of mulefat (*Baccharis salicifolia*) with a non-native grass understory. Mulefat scrub typically occurs in association with drainages or riparian systems but may also occur mixed with upland communities. This community may be classified as a wetland and regulated as jurisdictional by federal, state, and/or local agencies. The mulefat on the property appears to be recovering from past fire disturbance. Approximately 0.01 acres of mulefat scrub (disturbed) were mapped on the property along the drainage in the eastern portion of the property. Within that 0.01 acres, mulefat accounts for no more than 20% cover. The remainder of the species interspersed with the

mulefat are upland species. See the Jurisdictional Wetlands and Waterways Section for a discussion of the jurisdictional status of this community.

**TABLE 1. VEGETATION COMMUNITIES AND LAND COVER**

<b>Vegetation Community/Land Cover</b>	<b>Existing Acreage</b>
Diegan Coastal Sage Scrub	0.01
Disturbed Habitat	2.79
Eucalyptus Woodland	0.29
Mule Fat Scrub (Disturbed)	0.01
Southern Mixed Chaparral	0.54
Southern Willow Scrub	0.02
Urban / Developed	1.36
<b>TOTAL</b>	<b>5.02</b>

***Southern Mixed Chaparral (37120).*** Chaparral is widely distributed throughout California on dry slopes and ridges at low and medium elevations where it occupies thin, rocky, or heavy soils. The plants of this community have developed the ability to survive recurrent fires by producing seeds that require a fire-related cue to stimulate germination and/or by stump sprouting after being burned. Southern mixed chaparral is a common chaparral community typically characterized by a mix of common chaparral species. Some of the southern mixed chaparral on the property is recovering from fire disturbance. On the property, this community was characterized by toyon (*Heteromeles arbutifolia*), laurel sumac, chamise, scrub oak (*Quercus berberidifolia*), and southern honeysuckle (*Lonicera subspicata*). Approximately 0.02 acres of southern mixed chaparral and 0.54 acres of southern mixed chaparral (disturbed) were mapped on the property.

***Southern Willow Scrub (63320).*** Southern willow scrub is a dense vegetation community dominated by broad-leaved winter deciduous riparian species typically associated with drainage features. The understory of this community is typically poorly developed. This community is often classified as a wetland and regulated as jurisdictional by federal, state, and/or local agencies. On the property, this community is dominated by arroyo willow (*Salix lasiolepis*). Approximately 0.02 acres of southern willow scrub occurs in association with the small segment of a drainage that occurs in the southwest corner of the property. See the Jurisdictional Wetlands and Waterways Section for a discussion of the jurisdictional status of this community.

***Other Land Cover.*** Approximately 2.79 acres of disturbed habitat was mapped on the property, which included dirt field and other cleared and flattened areas on the property. Previous ground disturbance, compaction and leveling, and current maintenance of these areas have resulted in the disturbed nature of these areas. The disturbed habitat (11300) is predominantly bare dirt with scattered non-native weed species, including doveweed (*Eremocarpus setigerus*), black mustard (*Brassica nigra*), and tall horseweed (*Conyza canadensis*).

Approximately 1.36 acres of urban/developed areas (12000) occur on the property in association with the existing home development in the western portion of the property. Included within this category are the existing home, driveways, and associated landscaped areas.

### Special Status Species

Numerous special status plant and animal species are known from the area. Table 2 provides a summary of the special status species detected or with the potential to occur on the property based on a review of the CNDDB and the list of potentially occurring species provided by the County of San Diego. The results of the CNDDB search are provided in Figure 4. No special status species were detected on the property.

### Jurisdictional Wetlands and Waterways

Two minor drainage courses occur on the property that were surveyed to determine whether they would be considered jurisdictional by the U.S. Army Corps of Engineers (ACOE), California Department of Fish and Game (CDFG), and County of San Diego (County). Under the jurisdiction of the ACOE, both the drainages would likely be considered non-wetland waters of the U.S (0.05 acres). No ACOE jurisdictional wetlands were identified on the property. Under the jurisdiction of the CDFG which regulates streambeds and riparian habitat, both drainages would be considered jurisdictional streambeds (0.05 acres). Additionally, the narrow corridor of southern willow scrub surrounding the western drainage would be considered jurisdictional CDFG riparian habitat (0.02 acres). A very small patch of mulefat (*Baccharis salicifolia*) exists within non-native grassland habitat adjacent to the eastern drainage and would potentially be subject to the jurisdiction of the CDFG (0.01 acres).

Under Ordinance No. 9842 (An Ordinance Codifying and Amending the Resource Protection Ordinance), the County classifies an “RPO Wetland” according to the following definition:

- “(1) Lands having one or more of the following attributes are “wetlands”:
  - (aa). At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);
  - (bb). The substratum is predominantly undrained hydric soil; or
  - (cc). An ephemeral or perennial stream is present, whose substratum is predominately non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.
- (2) Notwithstanding paragraph (1) above, the following shall not be considered “Wetlands”:
  - (aa) Lands which have attribute(s) specified in paragraph (1) solely due to man-made structures (e.g., culverts, ditches, road crossings, or agricultural ponds), provided that the Director of Planning and Land Use determines that they:
    - (i) Have negligible biological function or value as wetlands;
    - (ii) Are small and geographically isolated from other wetland systems;
    - (iii) Are not Vernal Pools; and
    - (iv) Do not have substantial or locally important populations of wetland dependent sensitive species.
  - (bb) Lands that have been degraded by past legal land disturbance activities, to the point that they meet the following criteria as determined by the Director of Planning and Land Use:
    - (i) Have negligible biological function or value as wetlands even if restored to the extent feasible;

- (ii) Do not have substantial or locally important populations of wetland dependent sensitive species.”

Based on the County’s RPO Wetland definition provided above, the western drainage and associated riparian vegetation would be considered an RPO Wetland. The western drainage is classified as an ephemeral drainage with a defined bed and bank and is bounded by a narrow corridor of southern willow scrub vegetation. This ephemeral drainage meets the definition of an RPO Wetland under 1(cc) above because it is an ephemeral stream with predominantly non-soil substrate that contributes to the biological function of wetlands in the drainage system. This western ephemeral drainage supports a narrow corridor of southern willow scrub vegetation, which would be considered an RPO Wetland under 1(aa) above because it supports a predominance of hydrophytes. This drainage is considered relatively undisturbed and is connected to offsite habitat both upstream and downstream.

Based on the County’s RPO Wetland definition provided above, the eastern drainage would not be considered an RPO Wetland. The eastern drainage is ephemeral in nature and is contained within a swale-like topography that does not exhibit strong bed and bank characteristics. Although it supports occasional scattered mulefat within non-native grassland and chaparral vegetation, the drainage does not support a predominance of hydrophytes necessary to meet the RPO Wetland definition under 1(aa). Mulefat within the area mapped as Mulefat Scrub accounts for no more than 20% coverage. When considering the eastern drainage as a whole, Mulefat is less than one percent of the total coverage. The eastern drainage is not underlain by undrained hydric soils necessary to meet the RPO Wetland definition under 1(bb). Due to its ephemeral nature and swale-like topography, the drainage bottom retains the characteristics of the surrounding upland soils and vegetation community (i.e., it would not be considered non-soil and continues to support upland vegetation). This drainage originates from a culvert outfall under Shady Oaks Way. Upstream of Shady Oaks Way, the drainage is channelized in a concrete v-ditch. Downstream of the site, the drainage course is no longer bounded by swale-like topography, is crossed by a dirt road, and is developed with a citrus orchard and residential development. The section of drainage that occurs on the site is therefore geographically isolated from surrounding area’s wetland system and provides negligible biological function and value. As such, the eastern drainage is not considered to have non-soil substrate or contribute substantially to the biological functions or values of wetlands in the drainage system necessary to meet the RPO Wetland definition under 1(cc).

Figure 3 provides the wetland delineation and mapping of the jurisdictional features on the property. A total of 0.05 acres of ACOE jurisdiction occurs on the property, which is comprised of two ephemeral drainages. A total of 0.08 acres of CDFG jurisdiction occurs on the property in the two drainages, which is comprised of streambed, southern willow scrub, and mulefat scrub. At total of 0.02 acres of County RPO Wetlands occurs on the property in the western drainage.

#### **Other Unique Features / Resources**

No unique features or resources were identified on the property.

**TABLE 2 –SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING ON THE STUDY SITE OR IN THE VICINITY**

Scientific Name	Common Name	Federal Status	State Status	CNPS Status	General Habitat	Potential for Occurrence
<b>INVERTEBRATES</b>						
<i>Danaus plexippus</i>	Monarch butterfly	None	None		Roost sites along the coast from northern Mendocino County to Baja California, roosts located in wind-protected tree groves with nectar and water sources nearby.	<b>Not likely to occur;</b> not observed during survey; limited roosting habitat present onsite in wind exposed eucalyptus.
<b>AMPHIBIANS</b>						
<i>Bufo californicus</i>	Arroyo toad	FE	CSC		Rivers and larger creeks with sandy/gravelly bottoms and sufficient flows for tadpole development, adults spend majority of live in adjacent upland habitats.	<b>Not likely to occur;</b> ephemeral drainages on the property would not support the species; nearest known location is several miles away on Paradise Creek.
<i>Rana aurora draytoni</i>	California red-legged frog	FE	CSC		Marshes, pools within streams, lakes, ponds and other permanent water features	<b>Not likely to occur;</b> ephemeral drainages on the property would not support the species; likely extirpated from the county.
<i>Scaphiopus hammondi</i>	Western spadefoot	FSC	CSC		Sandy or gravelly soil in grasslands, open chaparral and pine-oak woodlands, coastal sage scrub; vernal pools or freshwater marshes are essential for breeding.	<b>Not likely to occur;</b> no suitable breeding habitat; extirpated throughout much of southern California.
<b>REPTILES</b>						
<i>Anniella pulchra pulchra</i>	Silvery legless lizard	FSC	CSC		Loose sandy soils in dunes, drainages, washes, and oak woodlands.	<b>May occur;</b> suitable soils exist; secretive species often difficult to detect.
<i>Clemmys marmorata pallida</i>	Southwestern pond turtle	FSC	CSC		Slow-moving streams with permanent water, ponds, and small lakes	<b>Not likely to occur;</b> ephemeral drainages on the property would not support the species.

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Scientific Name	Common Name	Federal Status	State Status	CNPS Status	General Habitat	Potential for Occurrence
<i>Cnemidophorus hyperythrus beldingi</i>	Orange-throated whiptail	None	CSC		Low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks.	<b>May occur;</b> suitable habitat exists onsite; species not observed during survey.
<i>Cnemidophorus tigris multiscutatus</i>	Coastal Western whiptail	FSC	None		Open areas in grasslands, scrublands, and woodlands.	<b>May occur;</b> suitable habitat exists onsite; species not observed during survey.
<i>Coleonyx variegates abbotti</i>	Coastal banded gecko	None	CSC		Chaparral, coastal scrub, and grassland habitats with rocky outcrops.	<b>May occur;</b> suitable habitat exists but lacks rocky outcrops. Species not observed during survey, but it is a secretive, nocturnal species.
<i>Diadophus punctatus similis</i>	San Diego ringneck snake	FSC	None		Diegan coastal sage scrub and grasslands	<b>May occur;</b> limited suitable habitat exists, but not observed during survey.
<i>Phrynosoma coronatum blainvillei</i>	Coast (San Diego) horned lizard	None	CSC		Coastal sage scrub and chaparral.	<b>May occur;</b> limited suitable habitat exists onsite; species not observed survey; local records.
<b>BIRDS</b>						
<i>Accipiter cooperii</i>	Cooper's Hawk	None	CSC		Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms, on river floodplains; also live in oaks.	<b>May occur;</b> suitable nesting habitat in the eucalyptus and oak trees onsite; abundant prey.
<i>Accipiter striatus</i>	Sharp-shinned hawk	None	None		Woodlands and urban areas with trees and large shrubs.	<b>May occur;</b> winter visitor not likely to breed in San Diego County.



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Scientific Name	Common Name	Federal Status	State Status	CNPS Status	General Habitat	Potential for Occurrence
<i>Agelaius tricolor</i>	Tricolored blackbird	None	CSC		Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California. Requires open water, protective nesting substrate and foraging area with insect prey within a few km of the colony.	<b>Not likely to occur;</b> no suitable nesting or foraging habitat.
<i>Ammodramus savannarum</i>	Grasshopper sparrow	None	CSC		Open grasslands, prairies, and abandoned croplands.	<b>Not likely to occur;</b> no suitable habitat exists onsite or in the immediate vicinity.
<i>Aquila chrysaetos</i>	Golden eagle	BEPA	CSC		Rolling foothill or coast-range terrain, where open grassland turns to scattered oaks, sycamores, or large digger pines. Cliff-walled canyons provide nesting habitat in most parts of range; also large trees in open areas.	<b>Not likely to occur;</b> no suitable nesting habitat exists onsite; very limited foraging habitat.
<i>Buteo lineatus</i>	Red-shouldered hawk	None	None		Riparian woodland, oak woodland, and eucalyptus woodlands.	<b>May occur;</b> suitable nesting and foraging habitat exist onsite and in the immediate vicinity; not observed during survey.
<i>Cathartes aura</i>	Turkey vulture	None	None		Forages over multiple habitats, nests in mountain crevices.	<b>May occur;</b> no suitable nesting habitat exists onsite, very limited foraging habitat; not observed during survey.
<i>Circus cyaneus hudsonius</i>	Northern Harrier	None	CSC		Marshes, grasslands, agricultural fields, and open coastal sage scrub.	<b>May occur;</b> no suitable nesting habitat exists onsite, very limited foraging habitat; not observed during survey.



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Scientific Name	Common Name	Federal Status	State Status	CNPS Status	General Habitat	Potential for Occurrence
<i>Dendroica petechia brewsteria</i>	Yellow warbler	None	CSC		Mature riparian forest and woodlands.	<b>Not likely to occur;</b> very limited suitable habitat exists onsite; may occur in the vicinity along drainages with more developed riparian community.
<i>Elanus caeruleus</i>	Black-shouldered kite	None	None		Riparian woodlands and oak woodlands adjacent to grasslands.	<b>May occur;</b> suitable nesting and foraging habitat exist onsite and in the immediate vicinity; limited foraging habitat; not observed during survey.
<i>Empidonax trailii extimus</i>	Southwestern willow flycatcher	FE	CE		Mature willow-dominated riparian habitat on major rivers and creeks with persistent water around and during the late spring and early summer.	<b>Not likely to occur;</b> ephemeral drainages on the property do not support sufficient riparian vegetation to support species; species known from only several locations in the County.
<i>Eremophila alpestris actia</i>	California Horned Lark	None	CSC		Short-grass prairie, “bald hills,” mountain meadows, open coastal plains, fallow grain fields, alkali flats.	<b>Not likely to occur;</b> no suitable habitat exists onsite or in the immediate vicinity.
<i>Ictera virens</i>	Yellow-breasted chat	None	CSC		Riparian woodland, forest, and scrub.	<b>Not likely to occur;</b> very limited suitable habitat exists onsite; may occur in the vicinity along drainages with more developed riparian community.
<i>Lanius ludovicianus</i>	Loggerhead shrike	FSC	CSC		Grasslands and open scrub/chaparral habitats.	<b>May occur;</b> limited suitable habitat exists; not observed during site survey.
<i>Larus californicus</i>	California gull	None	None		Beaches near the ocean and large lakes.	<b>Not likely to occur;</b> no suitable habitat exists onsite or in the immediate vicinity.

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Scientific Name	Common Name	Federal Status	State Status	CNPS Status	General Habitat	Potential for Occurrence
<i>Polioptila californica californica</i>	Coastal California gnatcatcher	FT	CSC		Coastal sage scrub below 2500 feet in elevation. Low, coastal sage scrub, in arid washes, on mesas and slopes.	<b>Not likely to occur;</b> very limited suitable habitat exists onsite; may occur in the vicinity in larger patches of coastal sage scrub; protocol surveys not considered necessary due to the small amount of available habitat on the site and proposed avoidance.
<i>Sialia mexicana</i>	Western bluebird	None	None		Oak woodlands with surrounding grasslands typically within large blocks of open space.	<b>May occur;</b> limited suitable habitat exists onsite; not observed during survey.
<i>Vireo bellii pusillus</i>	Least Bell's vireo	FE	CE		Willow and mulefat dominated riparian forests and woodlands.	<b>Not likely to occur;</b> very limited suitable habitat exists onsite; may occur in the vicinity along drainages with more developed riparian community; protocol surveys not considered necessary due to the small amount of available habitat on the site and proposed avoidance
<b>MAMMALS</b>						
<i>Antrozous pallidus</i>	Pallid bat	None	SCS		Arid regions of the southwest. Roosts in crevices in cliff faces, buildings, tunnels, and bridges.	<b>Not likely to occur;</b> suitable foraging habitat, but no suitable roost or maternity sites within the property.
<i>Bassariscus astutus</i>	Ringtail	None	None		Secretive, nocturnal species typically found in desert and mountainous regions of southern California.	<b>Not likely to occur;</b> not known from the area; no suitable habitat on the site.

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Scientific Name	Common Name	Federal Status	State Status	CNPS Status	General Habitat	Potential for Occurrence
<i>Chaetodipus</i> (= <i>Perognathus</i> ) <i>fallax fallax</i>	Northwestern San Diego Pocket Mouse	None	CSC		Coastal scrub, chaparral, grasslands, sagebrush in western San Diego County. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	<b>May occur;</b> very limited suitable habitat; not observed during survey.
<i>Chaetodipus</i> <i>californicus femoralis</i>	Dulzura Pocket Mouse	None	CSC		Variety of habitats including coastal scrub, chaparral and grassland in San Diego County. Attracted to grassland-chaparral edges.	<b>May occur;</b> very limited suitable habitat; not observed during survey.
<i>Euderma maculatum</i>	Spotted bat	None	None		Uses many habitat types throughout the southwest. Roosts in crevices in cliff faces.	<b>Not likely to occur;</b> suitable foraging habitat, but no suitable roost or maternity sites within the property.
<i>Eumops perotis</i> <i>californicus</i>	California Mastiff Bat	None	CSC		Uses many habitat types throughout the southwest. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	<b>Not likely to occur;</b> suitable foraging habitat, but no suitable roost or maternity sites within the property.
<i>Felis concolor</i>	Mountain Lion	None	SPM		Habitat generalist ranging across much of southern California, but typically inhabiting unpopulated areas.	<b>Not likely to occur;</b> known from the region but not likely to use on the property.
<i>Lasiurus blossevilli</i>	Western red bat	None	None		Uses many habitat types throughout the southwest. Roosts in trees.	<b>May occur;</b> suitable foraging and roosting habitat exists.
<i>Lepus californicus</i> <i>bennettii</i>	San Diego black-tailed jackrabbit	None	CSC		Grasslands, open scrub habitats, disturbed areas, and agricultural fields.	<b>May occur;</b> limited suitable habitat exists; not observed during survey.
<i>Myotis ciliolabrum</i>	Small-footed myotis	None	None		Uses many habitat types throughout the southwest. Roosts in crevices in cliff, gullies, and rocks.	<b>Not likely to occur;</b> suitable foraging habitat, but no suitable roost or maternity sites within the property.

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<i>Myotis evotis</i>	Long eared myotis	None	None		Typically found at higher elevation in pine forest. Roosts near the ground.	<b>Not likely to occur;</b> no suitable habitat exists.
<i>Myotis thysanodes</i>	Fringed myotis	None	None		Woodlands in foothills and mountains throughout the southwest. Roosts in crevices in cliff faces and buildings.	<b>Not likely to occur;</b> no suitable habitat exists.
<i>Myotis volans</i>	Long legged myotis	None	None		Typically found at higher elevation in woodlands and pine forest.	<b>Not likely to occur;</b> no suitable habitat exists.
<i>Myotis yumanensis</i>	Yuma myotis	None	None		Uses many habitat types throughout the southwest. Roosts in crevices in cliff faces, buildings, and tunnels.	<b>Not likely to occur;</b> suitable foraging habitat, but no suitable roost or maternity sites within the property.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	None	CSC		Sagebrush scrub, annual grassland, chaparral, and desert scrubs, often with cactus patches, rock outcrops, or rock piles.	<b>Not likely to occur;</b> no evidence of any <i>Neotoma</i> midden onsite.
<i>Nyctinomops macrotis</i>	Big free-tailed bat	None	None		Arid deserts of the southwest. Roosts in crevices in cliff faces.	<b>Not likely to occur;</b> no suitable habitat exists.
<i>Nyctinomops femorasaccus</i>	Pocketed free-tailed bat	None	CSC		Arid deserts of the southwest. Roosts in crevices in cliff faces.	<b>Not likely to occur;</b> no suitable habitat exists.
<i>Odocoileus hemionus</i>	Southern mule deer	None	SPM		Habitat generalist ranging across much of southern California	<b>Not likely to occur;</b> known from the region but not likely to use the property.
<i>Onychomys torridus ramona</i>	Southern grasshopper mouse	FSC	CSC		Coastal scrub, chaparral, and desert scrub communities with sandy soils.	<b>May occur;</b> limited suitable habitat exists.
<i>Perognathus longimembris brevinasus</i>	Los Angeles Pocket Mouse	FSS	SC		Lower elevation grasslands and coastal sage communities. Open ground with fine sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	<b>May occur;</b> very limited suitable habitat exists.

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Scientific Name	Common Name	Federal Status	State Status	CNPS Status	General Habitat	Potential for Occurrence
<i>Taxidea taxus</i>	American Badger	None	SC		Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Need sufficient food, friable soils and open, uncultivated ground. Prey on burrowing rodents.	<b>Not likely to occur;</b> limited suitable habitat predominantly surrounded by non-compatible land uses; no evidence detected during survey.
<b>PLANTS</b>						
<i>Arctostaphylos rainbowensis</i>	Rainbow manzanita	None	None	1B	Southern mixed chaparral with rocky soils	<b>Not likely to occur;</b> would have been detected during survey if present.
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	None	None	1B	Moist grasslands along vernal swales and periphery of vernal pools	<b>Not likely to occur;</b> no suitable habitat onsite.
<i>Harpagonella palmeri</i>	Palmer's grappling hook	None	None	2	Grasslands and coastal sage scrub with clay soils	<b>Not likely to occur;</b> suitable soils not present; not detected during site survey.
<i>Quercus engelmannii</i>	Engelmann oak	None	None	4	Canyons and open slopes in foothill and coastal regions in association with oak woodlands, chaparral, and grasslands.	<b>Not likely to occur;</b> would have been detected during survey if present.

**Federal and State Codes:**

FE = Federally Endangered

FT = Federally Threatened

FSC = Species of Concern

CE = State Endangered

CT = State Threatened

CSC = California Species of Concern

Fully-protected = Special state designation, regulates take of the species

BEPA = Federal Bald Eagle Protection Act

SPM = CA Special Protected Mammal

**California Native Plant Society (CNPS) Codes:**

1A = Plants presumed extinct in California

1B = Plants rare and endangered in California and elsewhere

2 = Plants rare and endangered in California, but common elsewhere

3 = Plants about which we need more information

4 = Plants of limited distribution (a watch list)

### **Significance of Project Impacts and Proposed Mitigation**

**Impact Analysis.** Three types of impacts to biological resources are considered: direct impacts, indirect impacts, and regional cumulative impacts. Direct impacts are those that directly remove or destroy resources onsite. Indirect impacts result from the effects of the construction or operation of the project on the surrounding resources. Both direct and indirect impacts can be either temporary or permanent. All of the projects and activities in a region contribute to the cumulative impact on biological resources for the region. Impacts of the project to biological resources would be considered potentially significant if they affect substantial acreage of natural vegetation including upland and wetland habitats; affect special status species; or affect the movement of wildlife between or connectivity of natural habitat areas.

The proposed project is a lot split, with an existing home on the western portion of the property. Although the proposed project would not affect the entire area shown as the “proposed project impact area”, this area, including the existing home and everything east of it, is assumed to be impacted for the purposes of this analysis. The shallow swale area the bisects the eastern lot would be avoided by the proposed project, although it will not be placed in designated open space so the County considers it impacted. A 100-foot-wide limited building zone (LBZ) area is proposed west of the existing home. The remainder of the parcel west of the LBZ would be placed in permanent dedicated open space. In accordance with the County Community Trails Master Plan, including the Valley Center Community Trails and Pathways Plan, a 10-foot-wide trail easement would be granted adjacent to the west side of Mac Tan Road on the property. This easement area was assumed to be impacted as it falls within the development impact area used in this analysis. The impact analysis, proposed project and open space, and acreages are provided in Figure 5 and Table 3.

No impacts to Diegan coastal sage scrub or southern willow scrub would occur as a result of the proposed project. The proposed project would result in impacts to 0.22 acres of southern mixed chaparral and 0.01 acres of disturbed mulefat scrub (Non-RPO). Other land cover to be impacted by the proposed project includes 1.28 acres of urban/developed, 2.46 of disturbed habitat, and 0.28 of eucalyptus woodland. Impacts to disturbed habitat, urban/developed, and eucalyptus woodland are considered less than significant. Impact to southern mixed chaparral and disturbed mulefat scrub would be considered significant, but would be considered mitigated below a level of significance through the establishment of the 0.77-acre designated open space on the property. The mitigation measures are described below. See Table 3 for the detailed analysis of impacts and mitigation measures.

Impacts to potentially occurring nesting migratory birds and nesting raptors would be considered significant but would be mitigated below a level of significance by implementing the avoidance measure described in the below.

For the purposes of this analysis, the eastern drainage course is considered impacted because this area is not preserved within designated open space. This drainage does not meet the definition of an RPO Wetland; therefore, the provisions of the Resource Protection Ordinance do not apply to this feature. This feature may, however, be considered jurisdictional by the Corps and the CDFG. Although the project proponent does not anticipate impacting this area, direct impacts to this drainage course through filling, diversion, or other ground disturbance would be subject to the permitting authority of these regulatory agencies.

**TABLE 3. IMPACT ANALYSIS**

<b>Vegetation Community/ Land Cover</b>	<b>Existing Acres</b>	<b>Dev. Impact Acres</b>	<b>Mit. Ratio</b>	<b>Req. Mit.</b>	<b>Onsite Preserv.<sup>1</sup></b>	<b>Impact Neutral<sup>2</sup></b>
Diegan Coastal Sage Scrub	0.01	--	2:1	--	--	0.01
Disturbed Habitat	2.79	2.46	--	--	0.32	<0.01
Eucalyptus Woodland	0.29	0.28	--	--	0.01	--
Mulefat Scrub (Disturbed, Non-RPO)	0.01	0.01	3:1	0.03	--	--
Southern Mixed Chaparral	0.54	0.22	0.5:1	0.11	0.27	0.05
Southern Willow Scrub	0.02	--	3:1	--	--	0.02
Urban / Developed	1.36	1.28	--	--	0.08	--
<b>TOTAL</b>	<b>5.02</b>	<b>4.25</b>		<b>0.14</b>	<b>0.68</b>	<b>0.08</b>

<sup>1</sup>Includes preserved acreage onsite within designated open space not including impact neutral areas. Of the total 0.68 acres of onsite preservation, only 0.27 acres of southern mixed chaparral are considered acceptable as County mitigation. In order to meet the required 0.14 acres of mitigation for impacts to mulefat scrub and southern mixed chaparral, 0.27 acres of southern mixed chaparral would be preserved in perpetuity within a 0.77-acre designated open space area that also preserve southern willow scrub and Diegan coastal sage scrub.

<sup>2</sup>Impact neutral acreage includes RPO Wetlands and RPO Wetland Buffers, which are preserved within open space but cannot be used as mitigation.

Indirect impacts of the project would potentially include temporary construction-related noise, temporary construction-related erosion and sedimentation, permanent increase in stormwater and nuisance runoff, and introduction of invasive species. Temporary increases in noise levels associated with project construction is considered to be a potentially significant impact to bird species potentially occupying the preserved riparian corridor on the project site. In order to avoid indirect noise impacts, avoidance measures have been proposed. Implementation of these measures would mitigate the potential indirect impacts below a level of significance. Temporary erosion and sedimentation are common concerns for projects that involve grading and other ground disturbance activities. Erosion of exposed soils can cause sedimentation into adjacent areas outside of the project site. These effects depend on the size of the project, the topography of the area, and the control measures employed. The proposed project would result in ground disturbance to a small acreage of land on a site with an essentially flat topographic gradient. As such, temporary erosion and sedimentation are not considered to be major considerations for this project. In order to avoid temporary construction-related erosion and sedimentation, the avoidance measures described below would be implemented to reduce these potential impacts below a level of significance. Industry standard best management practices (BMPs) would be



employed during grading and construction of the project to avoid any impacts of sedimentation on the adjacent areas.

The proposed project may cause an increase in stormwater runoff generated from the site due to impervious surfaces. Increased stormwater and nuisance runoff can lead to higher water volume and velocity into adjacent areas and increased pollutant levels in the runoff. Industry standard BMPs would be employed on the site to avoid significant impacts of stormwater and nuisance runoff. Residential developments often include a landscaping component that introduces horticultural species not typically found in natural areas. Some species used for landscaping are known to be invasive and can outcompete native plant species. Implementation of the proposed avoidance measures would reduce this potential indirect impact below a level of significance.

***Avoidance and Mitigation Measures.***

- Prior to the initiation of any site clearing or construction activities on the project site, the limits of work shall be accurately surveyed and fenced with environmental fencing.
- Avoid vegetation removal or grading during the nesting season (February – August). If avoidance of the nesting season is not possible, a pre-construction nesting migratory bird and raptor survey shall be conducted by a qualified biologist prior to the initiation of any site clearing or construction activities on the project site. A brief survey letter report shall be submitted to the County to document the results of the survey. If birds are found to be nesting in the vicinity of the vegetation clearing or grading, the qualified biologist shall provide recommendations for avoiding impacts to the nesting birds.
- All access, construction staging, and temporary construction impacts shall be confined within the limits of work or the adjacent developed areas.
- Industry standard best management practices shall be used to avoid erosion of or sedimentation into the adjacent areas. Recommended practices that could be employed include deploying weed-free hay bales, weed-free straw wattles, siltation fences, and sand bags as needed; avoiding grading during heavy rain; and timely implementation of these measures. Industry standard best management practices shall be employed to prevent, capture, and/or treat stormwater and nuisance runoff generated from the site.
- Landscaping plantings used on the site shall be non-invasive species. Plant species considered incompatible for use adjacent to open space would include any species identified on the California Invasive Plant Council's Invasive Plant Inventory (<http://www.cal-ipc.org/Pest%5FPlant%5FList/>).
- In order to compensate for the loss of 0.22 acres of southern mixed chaparral and 0.01 acres of disturbed mulefat scrub (non-RPO) and the potential plant and wildlife habitat it provided, impacts would be mitigated through the designation of 0.77 acres of open space along the western property boundary that includes RPO Wetland, RPO Wetland Buffer area, and surrounding upland areas. Based on the County's mitigation ratios (see Table 3), 0.11 acres of southern mixed chaparral mitigation and 0.03 acres of mulefat scrub mitigation would be required. Within the designated open space area, 0.27 acres of southern mixed chaparral would be preserved and used as mitigation for impacts. This mitigation provides nearly double the acreage required by the County for this project. Although southern mixed

chaparral would not provide in-kind mitigation for the small acreage of impact to non-RPO disturbed mulefat scrub, it is considered sufficient mitigation for the impact. The area of disturbed mulefat scrub proposed for impact was conservatively mapped as mulefat scrub, but was dominated by a non-native grass understory and surrounded by southern mixed chaparral species. Additionally, this area did not meet the definition of an RPO Wetland. Because the narrow strip of mulefat is intermixed and surrounded by upland communities, it functions to provide upland habitat; therefore, southern mixed chaparral is considered to be suitable mitigation for the mulefat scrub impact. Additionally, the establishment of designated open space over disturbed habitat (0.32 acres) would likely allow this area to convert back to native vegetation over time providing additional habitat in permanent open space. Furthermore, the area where the southern mixed chaparral and mulefat scrub "impacts" occur are not proposed for direct impact by the project; therefore, these areas will continue to exist but will not be formally protected within designated open space. The overall open space allocation would be considered adequate compensation for the habitat impacts resulting from the proposed project.

### **Cumulative Impacts**

Due to the relatively small size of the project, the negligible impact to natural habitat, and the mitigation measures proposed, the proposed project would not result in any cumulative or regional biological impacts.

Any questions regarding the survey and evaluation documented by this letter report can be directed to Mike Howard at (858) 552-8885.

Sincerely,  
Foothill Associates



Mike Howard  
Senior Project Manager

### **Figures and Attachments**

Figure 1 – Site and Vicinity

Figure 2 – Soils

Figure 3 – Biological Resources

Figure 4 – CNDDDB

Figure 5 – Proposed Project and Open Space

Attachment A – Species List

### **References**

California Department of Fish and Game (CDFG). 2005. California natural diversity database (CNDDDB). Sacramento, California.

Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. State of California Resources Agency.